

# ***JCM Initiatives Update***



**April 2007**



# Joint and Common Market Initiatives

Complete	Cost 3 Year Gross Benefit
----------	------------------------------

Evaluation	Cost 3 Year Gross Benefit
------------	------------------------------

Implementation	Cost 3 Year Gross Benefit
----------------	------------------------------

Not Recommended	Cost 3 Year Gross Benefit
-----------------	------------------------------

		2006		2007		2008	
Commercial	1	FTR Market Convergence	Alignment of FTR Timelines and Products (Note: All MISO cost) \$600,000 \$3,008,657			Cross Border FTRs in the allocations \$4,000,000 Analyzing	
						Cross border FTRs in auctions \$8,000,000 \$4,374,524	
	2	Price Rationalization and Convergence at the Border		PJM implementation of marginal losses \$600,000 N/A			
				Alternative Border Pricing Point Calculation \$200,000 Analyzing			
	3	Reduce Hurdle Rate	Alignment of PJM Operating Reserves and MISO Revenue Sufficiency Guarantee (Note: All MISO cost) \$600,000 \$3,764,432	Depancaking of PTP ancillary services (Control Area Services, T.O. Control Center Services, Reactive, Black Start) \$400,000 (\$2,505,757)			
	4	Broader Price Transparency and Common Reporting	Existing MISO & PJM Websites Linking of sites Data Available at Both Sites (LMPs, Tie Flows, Loads) \$500,000 \$1,952,165	Standard Data Exchange (Web Services) LMPs, Contingencies, Loads, Dispatch Signals, Outages, Emergency Event/Notifications \$3,000,000 \$2,547,477		Implementation of single MISO & PJM Website (Individual Websites go away) \$750,000 N/A	
			Common Search Capabilities \$200,000 \$1,125,000			Standard Data Visualization and Reporting Portal \$8,500,000	
			Enhanced Joint Website to Host Joint meeting and Events Calendar, Joint Documents and Reports \$600,000 \$1,125,000			Create a single MISO & PJM Data and Report Portal \$4,158,174	
	5	Increased Market Opportunities	Moving JOUs between markets \$100,000 \$156,851			Shared Regulation Market \$8,000,000 Analyzing	
	6	Operational Consistency	Common Long Term Transmission Queue \$200,000 \$1,091,108	Common Time Zones (Note: All PJM cost) \$5,000,000 N/A		Single Resource Adequacy Solution \$8,000,000 N/A	
			MISO Ramp Viewer \$150,000 \$913,703	Central location to view both ramp viewers \$100,000 \$1,527,405		Common Ramp Portal \$750,000 \$2,091,108	
			Alignment of OASIS Business Practices \$500,000 \$1,365,867	Coordinated OASIS \$1,200,000 Analyzing			
			Single OASIS \$8,000,000 \$6,168,760	Reserve Sharing \$8,000,000 N/A			
			Common Treatment of Dynamic Schedules/Pseudo-Ties \$200,000 \$382,934	Market to Market Relaxation of Constraints \$80,000 \$1,000,000			
			Investigation of Loop Flow Across the Combined Footprint N/A Analyzing	Dynamic Dispatchable Transactions and Schedules Analyzing Analyzing		Netting in the IDC Analyzing Analyzing	
			Market Flow Threshold Assessment N/A Reliability	Market Flow Threshold Reported to IDC \$300,000 Reliability			
				Outage Coordination N/A Reliability			
	7	Single Market	Year 1 - Rule Alignment & Market Portal Design \$15,000,000 \$5,000,000	Year 2 - Initial Market Portal Implementation \$40,000,000 \$27,000,000		Year 3-5 - Implementation of Single Market \$50,000,000 \$34,700,000	
Reliability	1	Emergency Energy Agreement	Alignment of Agreements and Practices \$100,000 Reliability			Super Regional Reserve Sharing Analyzing Analyzing	
	2	Black Start and Restoration		Alignment of Agreements and Practices \$500,000 \$936,000			
Plan	1	Joint Expansion Planning and Common Deliverability Studies	Joint Expansion Planning (Coordinated System Plan) \$20,000 Reliability	Cross Border Cost Sharing of Expansions \$1,580,000 Reliability			
	2		Common Deliverability Studies \$100,000 Reliability				
Total		Costs 3-Year Gross Benefit	2006 \$3,770,000 \$14,885,717	2007 \$1,580,000 \$3,463,405	2008 \$750,000 \$2,091,108		



# ***JCM Committed Initiatives***



# FTR Alignment

## Milestone Summary

C	Analyze Product
C	Stakeholder Review
C	Submit Filings to FERC
C	Develop Business Rules
C	Finalize Functional Requirements
G	Design and Development
G	Build and Test
G	Update Process and Procedures
G	Customer Training
G	Cutover to Production Phase 1
G	Cutover to Production Phase 2

**G** Overall Status

## JCM Leads

- Midwest ISO: E. Skiba
- PJM: S. Bresler

## Legend

C	Completed
G	On Target – No Issues
Y	Need to watch – Some Issues
R	In Jeopardy – Significant Issues

## KEY ACCOMPLISHMENTS

- Midwest ISO:
  - Completed business rule definition
  - Submitted response to comments and protests regarding long term transmission rights filing
  - Finalized functional requirements
- PJM Markets and Reliability Committee has approved an intra-planning year transmission rights allocation similar to the current Midwest ISO process.

## UPCOMING ACTIVITIES

- FERC approval of LTTR compliance filings.
- Midwest ISO to begin Design and Development Phase of project

## ISSUES & CONCERNS

- None at this time.

# OR & RSG Alignment

## Milestone Summary

C	Analyze Product
R	Stakeholder Review
R	Develop System Requirements
R	Modify Applications
R	Conduct Testing
R	Implement Changes

**R** Overall Status

## JCM Leads

- Midwest ISO: E. Skiba
- PJM: S. Bresler

## Legend

C	Completed
G	On Target – No Issues
Y	Need to watch – Some Issues
R	In Jeopardy – Significant Issues

## KEY ACCOMPLISHMENTS

- FERC issued Midwest ISO RSG Order on Rehearing – October 26, 2006.
- Midwest ISO submitted Compliance filings to October 26, 2006, Order on November 27, 2006, and December 26, 2006.
- Significant reductions in PJM OR and the Midwest ISO RSG charges have occurred since in November 2005.
- Midwest ISO received two FERC orders related to RSG on March 15, 2007.

## UPCOMING ACTIVITIES

- Continued PJM Stakeholder meetings.
- Midwest ISO is anticipating a FERC Order with regards to virtual transactions by end of first quarter 2007.
- Midwest ISO will develop project plan based on requirements in the FERC Order.

## ISSUES & CONCERNS

- FERC Order re: Midwest ISO RSG filing may impact timeline for RSG Task Force and subsequent filing of changes to EMT.
- Clearly different camps in terms of causation versus predictability (unclear that we will get to common rules).
- PJM is also considering changes (moving targets for both organizations) making close coordination imperative. PJM stakeholders have not been able to reach consensus on changes considered to date within the PJM process.

# PJM Marginal Losses

## Milestone Summary

C	Stakeholder Review
C	Complete FERC Filings
C	Develop System Requirements
C	Modify Applications
G	Conduct Testing
G	Implement Changes

**G** Overall Status

## JCM Leads

- Midwest ISO: E. Skiba
- PJM: S. Bresler

## Legend

C	Completed
G	On Target – No Issues
Y	Need to watch – Some Issues
R	In Jeopardy – Significant Issues

## KEY ACCOMPLISHMENTS

- November 6, 2006, FERC issued an order accepting the August 3, 2006, PJM marginal loss filing.
- PJM has completed stakeholder training sessions on marginal loss implementation.

## UPCOMING ACTIVITIES

- PJM production of DA market trial cases with marginal losses turned on will continue up until the June 1<sup>st</sup> go live date.

## ISSUES & CONCERNS

- No issues at this time.

# Relaxation of Constraints

## Milestone Summary

C	Tech. Software Design Document
C	Obtain Estimates from Vendor
Y	Modify Applications
Y	Conduct Testing
Y	Implement Changes

**Y** Overall Status

## JCM Leads

- Midwest ISO: T. Mallinger
- PJM: S. Bresler

## Legend

C	Completed
G	On Target – No Issues
Y	Need to watch – Some Issues
R	In Jeopardy – Significant Issues

## KEY ACCOMPLISHMENTS

- Midwest ISO and PJM agreed to scope of initiative.
- Estimates have been provided by vendor.
- Milestones have been revised based on the Spring 2008 implementation.

## UPCOMING ACTIVITIES

- Agreement changes will be taken through the RTOs stakeholder processes.
- RTOs to explore potential of partial implementation of initiative before Spring 2008.
- RTOs will explore options for a manual interim process until software modifications can be implemented..

## ISSUES & CONCERNS

- Based on Midwest ISO's software priority and to avoid duplicative effort required to implement this initiative in the current production environment and the new ASM software, the project has been scheduled for Spring 2008.

# Central Location to View Both Ramp Viewers

## Milestone Summary

G	Develop Business Requirements
G	Design Central Location & Select Appropriate Technology
G	Build and Test Central Location
G	Provide Training and Implement Changes

**G** Overall Status

## JCM Leads

- Midwest ISO: E. Skiba
- PJM: C. Advena

## Legend

C	Completed
G	On Target – No Issues
Y	Need to watch – Some Issues
R	In Jeopardy – Significant Issues

## KEY ACCOMPLISHMENTS

- RTO's will exchange 48 hours of Ramp information for display in each RTO's Ramp Viewer applications.

## UPCOMING ACTIVITIES

- Specifics of data exchanges will be jointly defined by Midwest ISO and PJM.
- RTO's will develop more detailed estimates to implement this initiative.
- RTO's IT organizations to agree on technical implementation.

## ISSUES & CONCERNS

- No issues at this time.



# Common Treatment Dynamic Sched./Pseudo-Ties

## Milestone Summary

C	Develop System Requirements
C	Modify Applications
C	Conduct Testing
C	Implement Changes

C Overall Status

## JCM Leads

- Midwest ISO: E. Skiba
- PJM: M. Bryson

## Legend

C	Completed
G	On Target – No Issues
Y	Need to watch – Some Issues
R	In Jeopardy – Significant Issues

## KEY ACCOMPLISHMENTS

- Software was enabled on April 2, 2007, to complete this initiative.

## UPCOMING ACTIVITIES

## ISSUES & CONCERNS

- No issues at this time.

# Black Start and Restoration

## Milestone Summary

C	Midwest ISO Technical Whitepaper
Y	Midwest ISO Develop Tariff Changes
G	Compare Midwest ISO & PJM Processes
G	Determine Tariff, Regulatory, Reliability Issues
G	Obtain Stakeholder Approval
G	Submit Regulatory Filings
G	Modify Policies, Procedures, Applications, Systems
G	Provide Training and Implement Changes
G	<b>Overall Status</b>

## JCM Leads

- Midwest ISO: E. Skiba
- PJM: C. Advena

## Legend

C	Completed
G	On Target – No Issues
Y	Need to watch – Some Issues
R	In Jeopardy – Significant Issues

## KEY ACCOMPLISHMENTS

- Midwest ISO Market Subcommittee and Reliability Subcommittee identified four areas that will require additional work: Selection of Black Start Units, Compensation, Cost and Self Supply.

## UPCOMING ACTIVITIES

- Ad hoc group consisting of MSC and RSC members being formed to address remaining outstanding items.
- Begin work on developing tariff language.

## ISSUES & CONCERNS

- None at this time.

# Cross Border Cost Sharing of Expansion

## Milestone Summary

C	File Policy Baseline Reliability Projects
C	Order on Reliability Filing
C	Compliance Filing on Reliability Filing
C	File Extensions with FERC
C	FERC issues Order for Technical Conference
C	Conduct Technical Conference
C	File 2 <sup>nd</sup> Extension for Econ X Border Allocation
R	FERC Staff submit findings to Commission
R	FERC Issues Order
R	Continue Stakeholder discussions
R	File Policy Cross Border Alloc. Econ. Project Costs

R

**Overall Status**

## JCM Leads

- Midwest ISO: E. Skiba
- PJM: S. Pincus

## Legend

C	Completed
G	On Target – No Issues
Y	Need to watch – Some Issues
R	In Jeopardy – Significant Issues

## KEY ACCOMPLISHMENTS

- FERC granted indefinite extension for economic cross border cost allocation sharing compliance filing.
- FERC issued order on PJM rate design on April 19<sup>th</sup> (Docket EL05-121-000).

## UPCOMING ACTIVITIES

- FERC decisions on Midwest ISO and PJM latest filings, on the methodology for reliability project cross-border cost allocation methodology.
- FERC Order establishing a schedule for completing stakeholder processes and filing proposed economic project cross-border cost allocation methodology.

## ISSUES & CONCERNS

- None at this time.

# ***JCM Further Analysis Initiatives***



# Market Flow Threshold Reported to IDC

## Milestone Summary

C	Develop Detail Project Plan
C	Vendor Requirement Specifications
Y	System Development
Y	Test System Changes
G	Mock Production Run
G	Cutover to Production

**G** Overall Status

## JCM Leads

- Midwest ISO: T. Mallinger
- PJM: J. Burlew

## Legend

C	Completed
G	On Target – No Issues
Y	Need to watch – Some Issues
R	In Jeopardy – Significant Issues

## KEY ACCOMPLISHMENTS

- Obtained 12-month field test approval from NERC Standards Committee.
- IDC, NNL Impact Calculator, and NNL Allocation Engine modifications to support this initiative are nearly complete.
- Midwest ISO reviewed its seams agreements and Energy Market Tariff (EMT) to determine changes required to support this initiative.
- Finalized revised implementation plan.

## UPCOMING ACTIVITIES

- Complete testing to support PJM implementation.
- PJM to begin 12-month Field Test by June 1, 2007.
- Midwest ISO to begin Field Test in Fall 2007. (NERC requested field test start by June 1, 2007 or in the fall 2007.)

## ISSUES & CONCERNS

- None at this time.

# Netting in the IDC

## Milestone Summary

G	Conduct Analysis
G	Develop Draft Recommendation
G	Review Preliminary Recommendation with ORS
G	Conduct Detail Analysis/Cost Estimates
G	Prepare Final Recommendation to ORS
G	Present Recommendation to ORS
G	ORS Action on Recommendation

**G** Overall Status

## JCM Leads

- Midwest ISO: T. Mallinger
- PJM: J. Burlew

## Legend

C	Completed
G	On Target – No Issues
Y	Need to watch – Some Issues
R	In Jeopardy – Significant Issues

## KEY ACCOMPLISHMENTS

- Decision was made to place this initiative on hold until the market flow threshold field test has started for Midwest ISO, PJM, and SPP.

## UPCOMING ACTIVITIES

## ISSUES & CONCERNS

- No issues at this time.

# Investigate Loop Flow Across Combined Footprint

## Milestone Summary

C	Obtain Tag Data
C	Obtain Midwest ISO/PJM Market Flow Data
C	Obtain Non-Market Gen-to Load Data
C	Conduct Analysis – Tag Data
C	Conduct Analysis Market Flow Data
C	Quantify Contributors – Selected Interfaces
Y	Generate Final Report – Selected Interfaces
G	Identify Next Steps

**G** Overall Status

## JCM Leads

- Midwest ISO: T. Mallinger
- PJM: C. Advena

## Legend

C	Completed
G	On Target – No Issues
Y	Need to watch – Some Issues
R	In Jeopardy – Significant Issues

## KEY ACCOMPLISHMENTS

- Draft report has been provided to ITC, IESO, NYISO, and TVA for comments.

## UPCOMING ACTIVITIES

- ITC, IESO, NYISO and TVA to submit comments on report by May 4, 2007.
- Finalize report
- Present findings to stakeholders.

## ISSUES & CONCERNS

- Final report issuance is in “yellow” status because it will occur in May, after the originally anticipated March 31<sup>st</sup> date.

# Coordinated OASIS

## Milestone Summary

C	Perform Analysis
C	Stakeholder Review
G	Develop Cost Benefits/Estimate
G	Conduct Internal Stakeholder Reviews
G	Review Results at Joint Stakeholder Meetings

**G** Overall Status

## JCM Leads

- Midwest ISO: E. Skiba
- PJM: C. Advena

## Legend

C	Completed
G	On Target – No Issues
Y	Need to watch – Some Issues
R	In Jeopardy – Significant Issues

## KEY ACCOMPLISHMENTS

- Midwest ISO and PJM have begun conceptual design for Coordinated OASIS that links reservations in both OASIS systems so that cost estimates can be developed by vendors and internal staff.
- Approach document has been created and submitted to Midwest ISO OASIS vendor for revised estimate.
- Midwest ISO has developed estimates for internal work.

## UPCOMING ACTIVITIES

- Cost/benefits will be presented to Joint Stakeholders and reviewed by each RTO's stakeholders before a final decision is made to commit to this initiative.
- Midwest ISO to receive estimates for vendor work.

## ISSUES & CONCERNS

- No issues at this time.



# Alt. Border Pricing Point Calculation

## Milestone Summary

<b>C</b>	Perform Analysis
<b>Y</b>	Identify Changes
<b>Y</b>	Stakeholder Review
<b>Y</b>	Decision Point on Cost Benefit Analysis

**Y** Overall Status

## JCM Leads

- Midwest ISO: T. Mallinger
- PJM: S. Bresler

## Legend

<b>C</b>	Completed
<b>G</b>	On Target – No Issues
<b>Y</b>	Need to watch – Some Issues
<b>R</b>	In Jeopardy – Significant Issues

## KEY ACCOMPLISHMENTS

- Midwest ISO and PJM have completed initial analysis on proxy bus prices. When differences occur in proxy bus prices the differences generally converged within relatively short time frames.

## UPCOMING ACTIVITIES

- Results of analysis on proxy bus prices will be presented at the June 1, 2007, Joint Stakeholder Meeting.

## ISSUES & CONCERNS

- None at this time.

# Dynamic Dispatch. Sched./Dispatch. Trans.

## Milestone Summary



Review Analysis with Stakeholders

Determine Next Steps



Overall Status

## JCM Leads

- Midwest ISO: T. Mallinger
- PJM: S. Bresler

## Legend



Completed

On Target – No Issues

Need to watch – Some Issues

In Jeopardy – Significant Issues

## KEY ACCOMPLISHMENTS

- Midwest ISO and PJM have completed initial analysis on proxy bus prices. When differences occur in proxy bus prices the differences generally converged within relatively short time frames.

## UPCOMING ACTIVITIES

- Results of analysis on proxy bus prices will be presented at the June 1, 2007, Joint Stakeholder Meeting.
- RTOs to continue analysis of border price differentials as upcoming implementations of other JCM initiatives occur.
- RTOs are conducting preliminary analysis to determine if initiative should be taken off “hold” status.

## ISSUES & CONCERNS

- None at this time.

# Super-Regional Reserve Sharing

## Milestone Summary

**G** TBD

**R** Overall Status

## JCM Lead

- Midwest ISO: E. Skiba
- PJM: S. Bresler

## Legend

<b>C</b>	Completed
<b>G</b>	On Target – No Issues
<b>Y</b>	Need to watch – Some Issues
<b>R</b>	In Jeopardy – Significant Issues

## KEY ACCOMPLISHMENTS

- The Midwest ISO Contingency Reserve Sharing Group (CRSG) has elected not to pursue amending their agreement to permit sharing of reserves with other reserve sharing groups.
- Existing emergency energy agreements between Midwest ISO border companies and adjoining RTOs will be used if Emergency Energy is needed.
- No further action will be taken on this initiative at this time.

## UPCOMING ACTIVITIES

## ISSUES & CONCERNS

- Midwest ISO will revisit this initiative once it becomes a Balancing Authority or if its Ancillary Services Market is delayed.

# Outage Coordination

## Milestone Summary

G	Develop Inter-regional Outage Coordination White Paper
G	Conduct Internal RTO Reviews
G	Stakeholder Review
G	Implement Inter-regional Outage Coordination White Paper

**G** Overall Status

## JCM Lead

- Midwest ISO: E. Skiba
- PJM: C. Advena

## Legend

C	Completed
G	On Target – No Issues
Y	Need to watch – Some Issues
R	In Jeopardy – Significant Issues

## KEY ACCOMPLISHMENTS

- Midwest ISO, PJM, TVA, and SPP have developed draft Inter-Regional Outage Coordination White Paper.
- Midwest ISO reviewed draft white paper with the Operational Planning Working Group.

## UPCOMING ACTIVITIES

- Finalize Inter-Regional Outage Coordination White Paper

## ISSUES & CONCERNS

- None at this time.

# Shared Regulation Market

## Milestone Summary

G	Resolve CA Consolidation Issues
G	Analyze Options Shared Reg. Mkt.
G	Perform Detail Study
G	Identify Changes Policies, Procedures, applications, etc.
G	Review Results with Stakeholders
G	Go/No Go Decision

**G** Overall Status

## JCM Lead

- Midwest ISO: T. Mallinger
- PJM: S. Bresler

## Legend

C	Completed
G	On Target – No Issues
Y	Need to watch – Some Issues
R	In Jeopardy – Significant Issues

## KEY ACCOMPLISHMENTS

## UPCOMING ACTIVITIES

- Analysis on this initiative will begin in late 2007.

## ISSUES & CONCERNS

- None at this time.

# Cross Border FTRs in the Allocations

## Milestone Summary

G	Determine allocation process changes to create alignment
G	Define business rules for resolving differences
G	Perform Detail Cost/Benefit Analysis
G	Review Results with Stakeholders
G	Go/No Go Decision

**G** Overall Status

## JCM Lead

- Midwest ISO: R. Doying
- PJM: S. Bresler

## Legend

C	Completed
G	On Target – No Issues
Y	Need to watch – Some Issues
R	In Jeopardy – Significant Issues

## KEY ACCOMPLISHMENTS

## UPCOMING ACTIVITIES

- Analysis on this initiative will begin in late 2007.

## ISSUES & CONCERNS

- None at this time.

# ***Completed Initiatives***



# Completed Initiatives

## **Committed Initiatives**

- Midwest ISO Ramp Viewer
- Moving JOUs Between Markets
- Broader Price Transparency – Common Search Engine
- Broader Price Transparency – Enhanced Joint Website
- Broader Price Transparency – Link Midwest ISO PTP and PJM eData sites
- Common Long-Term Transmission Queue
- Alignment of OASIS Business Practices
- Emergency Energy Agreements – Alignment of Agreements and Practices (Decision not to proceed with initiative)
- Joint Expansion Planning (Coordinated System Plan)
- Common Deliverability Studies
- Common Treatment of Dynamic Schedules and Pseudo Ties

## **Require Further Analysis**

- Production Cost Study
- Common Time Zones – PJM Move to EST (Decision not to proceed with initiative)
- Market Flow Threshold Assessment (Decision to move forward with 12-month field test)
- Super Regional Reserve Sharing (Decision not to proceed with this initiative)